

## ASKING THE RIGHT QUESTIONS, SOLVING THE RIGHT PROBLEMS

### TYLER MEREDITH

As we rethink our labour market policy, we have to improve the collection and use of data We also need to engage employers and educational institutions in an analysis of skills.

Pour revoir notre politique relative au marché du travail, il nous faut améliorer la collecte de données et leur utilisation. Nous devons aussi inciter les employeurs et les établisssements d'enseignement à procéder à une analyse des compétences.



I fyou've paid even passing attention over the last several years to the litany of news stories about the state of the Canadian labour market, you've probably heard one or more of the following five statements:

- Due to an aging population, Canada faces a looming "shortage" of workers in different occupations, a mismatch between available jobs and skills in which there are "people without jobs and jobs without people."
- 2) Regional labour markets are rigid and unresponsive to the needs of the country as a whole because of regulatory and entitlement barriers (such as welfare) that hold people in place, making it difficult for labour to flow efficiently across the country.
- 3) New labour force growth will come from immigration and em-

ploying more people in traditionally underrepresented groups such as people with disabilities and Aboriginal people.

- 4) Supporting a more highly educated population is the path to good, high-paying jobs in the future; in other words, we have to increase enrolment in science, technology, engineering and math (STEM) disciplines.
- 5) We have too many graduates in certain fields of study (read: the humanities and social sciences) who aren't employable in the jobs in high demand.

These statements are a concise summary of what the informed public has probably taken away from listening to politicians, employers and analysts debate Canadian labour market policy. These points are not wrong indeed, each contains some important elements of the truth about where work and earnings are headed in Canada. But as a story they are incomplete, vague for the purposes of policy and in some cases founded on a contradictory or incorrect interpretations of the data.

What they don't tell us is what needs to be done on the skills front in concrete terms. That we need to change immigration policy or improve the labour market relevance of post-secondary education is fine as a general diagnosis. But how do we move beyond generalities? If there is indeed a problem of a skills shortage or mismatch, how has it changed over time in relation to the labour market? What should universities be doing to improve the labour market success of graduates from the traditional humanities? On these and other points, the debate has not been clear.

Yet labour market policy is one area where there is a fairly broad body of evidence and research. Canada boasts a strong cluster of academic researchers

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who are willing to use Canadian data (which can be hard to come by), and the Canadian Labour Market and Skills Researcher Network has produced 132 relevant working papers since 2008. They are by no means the only resources for empirical research on the topic.

So why is the policy debate so stale?

The reason is we haven't brought the information together in a way that answers questions about what we know (and what we don't know) on the skills question. So it is noteworthy that the Social Sciences and Humanities Research Council (SSHRC) last year commissioned a series of papers (the 2013 Knowledge Synthesis series) to help put our knowledge on these issues into perspective.

Rather than break new empirical ground, the goal with this series was to synthesize the existing research. While it does not paint an exhaustive

picture of the Canadian labour market, the 16-paper series does help us better understand what the Canadian and international literatures have to say about these statements that have shaped the public debate. (For the full list of the SSHRC papers see http://bit. ly/1roYNxc). What follows is a look at what they show us.

#### Fact: We're doing all right

Echoing what analysts at the TD Bank and Statistics Canada as well as IRPP author Cliff Halliwell have found, the gist of the message from the research is good news: despite the long and underwhelming recovery, Canada's labour market is doing all right. We do not lack talent, and the demand and supply of labour are fairly well balanced at the national level.

Susan McDaniel and her co-authors examined more than 200 peer-reviewed articles and reports published over the last decade that deal with projections of Canada's labour market. They found no evidence to support the assertion made by some that Canada's labour force will not have enough workers to meet demand between now and 2030. The math shows our labour force will continue to grow, albeit at a much slower rate. To the extent that there are shortages, they are regional, sectoral and often short-lived, as employers and governments adjust.

Why, then, does the Canadian debate continue to be characterized by the belief that there is a current or looming shortage of skilled workers?

Much of the debate about shortages stems from the reliance on long-term labour market projections, which are imperfect. While these systems, most notably the Canadian Occupational Projection System (COPS), are an important source of information for macroeconomic planning, they cannot be taken as gospel. Will there really be a shortage of some 25,000 truck drivers by 2020, as the Conference Board estimated in a 2013 report? How will these numbers change as we adopt driverless technology?

Labour markets are constantly evolving. Not many people would have predicted in the early 2000s that the labour force participation of older workers would

rise as quickly as it has since 2006. We need to know more about what lies behind these projections, especially if they are to be used to assess where the occupational demand will be in the future. If there is going to be a labour shortage of some kind, we need to sharpen our analysis of what the models predict will be the responses of wages, technological adoption and the supply of human capital.

In theory, we should expect that, over time, any imbalances in labour will be reflected in variations in wage growth. Where there are labour shortages, wages should rise. But, as reported in TD's analysis last fall, wage and job vacancy data across occupations between 2010 and 2013 reveal a striking similarity between wage growth among the occupations that are perceived as facing shortages (such as trades and engineering) and occupations perceived as having a surplus (such as teaching and manufacturing).

If there is a shortage, even an isolated one, why aren't we seeing a faster pickup in wages in the corresponding occupations? We do not have a clear explanation but an emerging literature suggests that when faced with shortages, Canadian firms are adept at using all the many levers at their disposal — such as increasing the hours worked and implementing flexible work arrangements — to address their short-term labour shortages.

Statistics Canada's Job Vacancy Survey asks two questions of employers: whether they have vacancies, and how many. Such limited information does not enable us to drill down into all the different ways that firms can meet their business needs. Are they spending more time and money to find labour? Are they raising wages? What is their assessment of the candidates who come forward? How firms answer these queswe are really facing.

Whatever the exact explanation, the answer won't be found by simply looking at the supply/demand balance of labour. Improving the quality of labour market data, particularly the availability of data on what's happening within firms, should be priority number one for federal labour market policy.

Education: Are we teaching the right skills? The relationship between our education system and labour market needs is at the heart of the debate about whether there is a "skills mismatch." This raises two questions: first, are we producing the right kinds of skills within our educational programs and second, how do these educational programs enable people to transition into the labour market?

I have already noted that we need to shift our focus away from the level

of education workers attain and toward looking at the *content* and *quality* of skills in the labour market. Since we do not know where the major technological shifts will occur, we can't hang our hats on any one occupation or industry. Instead, we need to assess how well we are doing in developing a broad range of general and specific skills.

One approach is to look at how Miana Plesca and Fraser Summerour educational system compares with field attempt to quantify the level and those of other countries regarding determinants of the skills mismatch in which skills are emphasized. As many Canada over time. Perhaps surprisingly, believe that STEM is an area in which when we measure whether people are Canada needs to reach higher, the case getting jobs that reflect their level of study by Diane Pruneau et al. offers imeducation and skills, Canada appears to portant insights. The authors examine be no worse off today than it was a dechow provincial curricula for science ade and a half ago. If anything, the situand technology in grades 6-8 compare ation is improving as the proportion of tions will tell us what kinds of problems with those in other countries in terms the labour force considered undereduof the ranges of skills they emphasize cated continues to drop. and their relationship to the skills ex-The fundamental challenge for the pected to be in demand over the compost-secondary education sector is that ing decades. as undereducation has fallen, the share

Their results show that while Canadian provinces make great efforts to teach analysis, planning and creativity, our science and technology curricula often pay little attention to

systematic thinking, entrepreneurship and management, as well as specific information and communications technology skills like programming or transforming information.

This illustrates the importance of how we design curricula. The results of Pruneau et al. aren't comprehensive enough to tell us about the quality of STEM skills in Canada, but they remind us we need to think broadly in determining the skill sets required for a globally competitive labour market.

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#### Overeducation: Failure or success?

The debate over the "skills mismatch" occurs with little historical context. In this respect, the question is not whether we have a skills mismatch — there will inevitably be a certain amount but what is the magnitude and nature of the mismatch we face, and how does that compares to the past.

of those considered overeducated has risen slightly. Overeducation is a not insignificant phenomenon, and will likely become more important as the average level of education continues to increase.



A vivid though not entirely perfect example of this comes from the work of Paul Yachnin et al., who studied the future of the doctorate in the humanities. Their analysis shows only 10 to 15 percent of Canadian humanities PhD students complete their programs and go on to get faculty positions. Approximately half leave their programs before completing them, and of those who do complete, many end up in jobs outside academia.

While there are many uses for a PhD in government, statistical agencies, research organizations and business, we need to rethink how the PhD is designed to better correspond with where graduates end up in the labour market. But the Yachnin et al. results should also make us reexamine the broader structure of both master's and PhD programs, and whether appropriate incentives exist for students to figure out their career paths before applying to a PhD program.

Separate work by David Green and Kelly Foley suggests that if there is less of a premium on higher education, it may in part reflect a shift in demand toward middle-skill jobs, particularly in the resource sector. The fact that in western Canada a college graduate can realize higher earnings than a univer-

sity graduate suggests we need to be careful about how we think about highof different skills in society.

What is the right balance between enabling appropriate access to higher learning, providing a broad set of skills that is more than just about the requirements of immediate employment, and being responsive to the needs of employers? The answer isn't obvious, but it is critical that policy-makers begin to reflect on these seemingly inconvenient truths.

When we look at the evolution of literacy and numeracy scores among young adults in Canada over the last several decades (see figure below), it is clear we have to do more to be globally competitive than just increase our (already high) levels of education and better direct students into fields of study that reflect labour market needs. The problem is more complex.

It's important to keep in mind that the effectiveness of institutions in generating general skills for employment and the structural shift in labour demand are separate but related issues. In a recent survey of human resources executives among its member companies, the Canadian Council of Chief Executives found a reasonable level of satisfaction (only 25

percent were neutral or dissatisfied) with the preparedness of recent hires coming er education and how we ensure a mix out of universities or colleges. Employers were also far less likely to cite the educational system as the principal source of the problem when they perceived there were skill shortages.

> The question may simply be, do we consider overeducation to be a good thing or a bad thing? If overeducation results in the replacement of high school with college and university degrees as the minimum level of education, then our problem may be more about curriculum than about access to higher education. But with nearly 70 percent of young workers coming into the labour market with some post-secondary education, it's time to question the role of education in the production of skills.

#### Needed: Better information at the local level

Once we have improved the range and depth of our labour market information, we must determine how this information is disseminated. In most professions, there are many paths to many jobs (the exceptions being the few professions, like law or medicine, where the link is fairly tight between the field of study and occupation). Increasingly what matters is how education generates particular skill sets and how individuals can leverage those skills across occupations. This is particularly true when it comes to "soft" and noncognitive skills, which employers report are in great demand. If the best we can do is look at the field of study of a particular degree holder, without more information on the specific skills the person has as a result of having that degree, then we may be missing a key requirement in how educational institutions, workers and employers interact to make decisions.

So, how do we get better information on skills at a more local level?

Implicit in a lot of the discussion about labour market information (LMI) is that better coordination, collection and distribution of data will solve many of our problems. That is indeed the critical first step. But as two very different papers in this SSHRC series show, a "build it and they will come" strategy will not be enough.

We have to look at how LMI is used at two levels: how it informs and directs the individual user in making decisions about which careers and opportunities to pursue, and how communities use those data to develop local labour market strategies.

Take the case of northern communities in Canada, many of which face great transformations as a result of resource development. As Frances Abele and Senada Delic point out in their study of youth employment in northern communities, we need to determine how a sustainable labour force can be developed, not just how to attract potential workers into the region's few in-demand occupations.

As we've seen in Alberta, resource development raises employment and wages across all occupations and sectors. As Nicole Fortin and Thomas Lemieux put it in their examination (separate from SSHRC) of the impact of resource development on median wages in the western provinces, it is a tide that "lifts all boats." Communities need to have a long-term vision for employment, one that is supported by information about what motivates different groups to move into the labour market and develop their skills.

And yet, as Abele and Delic find, "no research...focuses specifically on youth employment success: that is, what are the circumstances and attributes that make it possible for young Aboriginal people in northern Canada to find suitable work and to build satisfying careers? Such knowledge would improve the capacity of employers and policy-makers to provide employment opportunities efficiently."

Filling this gap will be crucial in empowering communities.

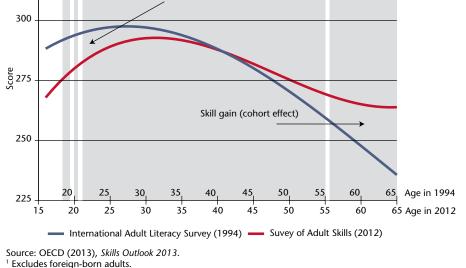
But we also need to move LMI beyond simply measuring outcomes through the lens of education or occupation toward gathering data on specific skills. Currently most of what is measured is based on either occupation or employment, or the highest level of attained education. If employers are making important hiring decisions based on their assessment of the

skills of candidates, how meaningful is it for the general public to know what the returns are to one level of education or another?

Hannah Scott looks at "skill sheds" and whether they would be useful in Canada. A skill shed is a local planning tool that surveys employers to determine their future skill and task requirements, and then compares the findings with the characteristics of the community's labour force. Pioneered in a number of US states, a skill shed enables communities to gain a clearer understanding of what they have to offer and how it matches up with employers' needs. With a sufficient critical mass of information gathered from skill sheds across jurisdictions, employers could gain greater insight into the comparative advantage of different regions and how to focus their search efforts when there are short-term shortages.



CANADIAN ADULT LITERACY SCORES, BY AGE AND COHORT, 1994 AND 2012

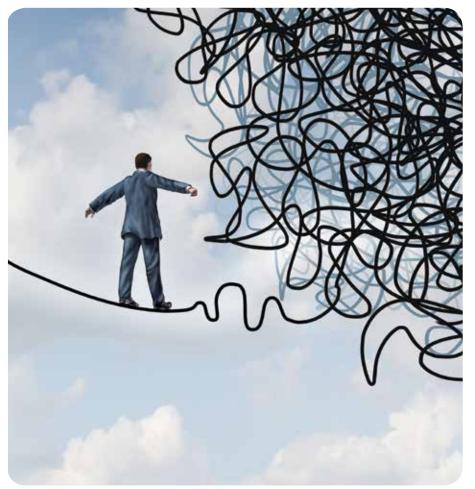






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We need to think broadly in determining the skill sets required for a globally competitive labour market. There has not been enough evaluation of skill sheds in the US to know whether they will improve labour market outcomes. But we know that we need to better integrate skills and LMI and, ideally, connect this information to local planning and employer-engagement activities.

## Vital: Understanding how employers behave

All of this is important because as we move from an environment in which labour is plentiful to one where it is somewhat tighter, there will be a significant premium on how employers find, match and employ the skills of all groups.

How we make that transition is still uncertain, but we know it will likely require three things: 1) improved job matching, 2) increased participation in the labour force of traditionally underrepresented groups and 3) enhanced workplace opportunities for workers to enhance their skills. What we don't really know is how we will translate these changes into reality.

A growing literature dealing with labour economics, business strategy and management studies suggests that individual workplace and management practices are crucial in explaining the differences between firms whose productivity is high and those whose productivity is low. How firms manage employees, for example — especially training and performance — matters to firms' competitiveness and success.

Two papers in the SSHRC series (Lindsay et al. and Leck et al.) suggest ways to overcome barriers to the labour market participation of underrepresented groups such as immigrants, people with disabilities and Aboriginal people. They suggest an effective route is to foster supportive workplace practices and accommodations through incentives and facilitation. This is a departure from policy initiatives that primarily emphasize mandates or requirements to accommodate.

This could involve increasing the linkages between employers and stakeholders involved in workplace accommodations, directly assisting with the cost of workplace accommodations (particularly in improving the employment of people with disabilities) and creating the space and infrastructure to promote formal, online peer networks for mentoring. (This last suggestion is novel in that for relatively little cost it can help to bridge the barriers faced by people who lack the experience and the contacts to further their careers.)

A paper I wrote with Benoit Dostie, finds an important link between investment in training, organizational performance and workplace productivity. But rather than focusing on the quantity of training, as much policy discussion does, we need to look at how training is deployed within firms and, specifically, how it relates to the innovation cycle. Designing policy around the practices within firms is not an easy task. It adds a substantial layer of complexity that is not easily addressed by traditional instruments of labour market policy. But that's the challenge.

## Takeaway: Only government can coordinate

So what should be the message for policy-makers? This article has identified two themes: We need to refine data collection to better reflect what is happening down below the 35,000-foot-altitude perspective of the national labour market; and policy-makers need a better feedback loop on what happens in the market as it is experienced by employers.

These points bypass many of the issues that are dominating the discussion of Canadian labour market policy: labour market mobility, immigration levels, entitlement reform and the myriad other issues. That's because the data and research show we're doing pretty well on the big picture. Canada ranks high in the OECD on labour market flexibility, it has experienced far less skill polarization than the US has over the last several decades, and it still boasts a relatively high employment rate. For some time now, a portion of the public debate has focused on the role of employers and the perception that em-

For some time now, a portion of the public debate has focused on the role of employers and the perception that employers aren't "doing enough" to solve their own problems. This is the wrong focus. Historically our labour market has operated with comparatively high rates of labour market participation and employment, including the highest average employment rate (persons aged 15-64) of all G7 countries between 2003 and 2012. Our institutions and actors have been conditioned to believe that labour is easy to find and employ.

But in an environment where skills matter more than education levels, and where what happens inside the firm is increasingly important, how we think about policy will have to change. Policy will likely be less about sweeping programs that focus on average outcomes, or raising labour supply through im-



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migration levels or welfare reform, and more about putting in place the conditions under which the labour market works for its millions of individual businesses and workers.

This idea calls us to think about the role of government as an intermediary that facilitates linkages across labour market institutions and actors in order to get better data, engage employers and labour, enhance the ability of communities and institutions to use those data, improve the design of curriculum and support pilot initiatives that can be replicated and brought to scale. Government is the only player that straddles all of these domains. This will not be simple. Last fall the provincial and federal ministers responsible for labour market policy held their first meeting in several years. But the complexity of multilevel governance cannot be used as an excuse for inaction. We need government to get the basics right. And it can start by helping us all to ask the right questions.

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